

Discussion

After 9 months of operation of the ambulatory unit, it is our feeling that surgical care of a quality comparable to that of inpatients can be delivered with a cost savings and an economy of scarce hospital beds. We feel that a hospital-attached unit may operate more efficiently with greater latitude of types of operative cases and possibly may offer greater safety to the patient than does an independent unit. In general this unit has been highly successful and this success is based upon the satisfaction of the following requisites: adequate population base, appropriate selection of patients, professional staff support, potential for increasing the capacity of the operating rooms, recovery rooms and anesthesia departments, waiting lists for hospital beds, appropriate unit size, and cooperation of third parties. If these criteria are satisfied it would appear that the development of such units in other settings would also meet with success. It became clear that the patient population was willing to accept care in the manner

deemed appropriate by the surgeon and that this offered no problem.

Summary

The experience of this ambulatory unit suggests that uncomplicated surgical care was delivered on an ambulatory basis in a satisfactory manner. The quality of care delivered appeared to be comparable to that provided to the inpatient. Significant cost savings were realized (approximately 25%) and hospital bed utilization was reduced (approximately 2 days per ambulatory patient). We feel the concept is worthy of consideration for implementation by others.

References

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DISCUSSION

DR. C. ROLLINS HANLON (Chicago): I have enjoyed this clear and concise estimate of the situation regarding free-standing versus hospital-based surgical facilities by Dr. Davis and his associates. The American College of Surgeons has had a number of inquiries about the stance which organizations or individuals should take toward development of such facilities.

These inquiries have come from the American Medical Association, from the National Blue Cross Plans, from the Joint Commission on Accreditation of Hospitals, and from a number of surgeons who are considering the possibility of initiating such facilities and wish to know the attitude of organized surgery toward short stay surgical facilities.

We have also had inquiries from the Phoenix Surgicenter itself. They were seeking approbation of the College in order to facilitate more widespread approval by third party payors.

As many of you realize, the Phoenix Surgicenter has been approved by approximately 100 insurance carriers. They have been approved by the Blue Shield Plan, and by certain local organizations, including the health planning council in their county. They have not been approved under

Part A of Medicare. An attempt is being made to change the relevant Social Security legislation by a bill introduced into the House by Congressman Rhodes.

One possible reason why free-standing surgical facilities have not been approved by the National Blue Cross Plan, although they have been approved by Blue Shield, is because Blue Cross Plans are in serious financial difficulty in their Federal Employee Program. This difficulty revolves around the authorization which had been urged on Blue Cross for many years to include certain outpatient services in their basic plan. It was anticipated that this expansion of outpatient coverage would diminish expensive hospitalization.

Actually, the Federal Employee Program of National Blue Cross, a so-called showcase account comprising over five million individuals, went in 3 years to a deficit status estimated at more than \$60 million. This was related to an incredible proliferation of outpatient studies, such as laboratory tests and radiographs, without a corresponding saving by decreased inpatient utilization. Although theoretically the increased use of outpatient facilities should save money, this did not follow.

I cannot discuss definitively the differences between free-standing and hospital-based facilities,

except to note that in Phoenix the controversy is submerged, whereas in another institution in Providence, Rhode Island, the dispute is more overt. The latter facility has been in great difficulty because it has not been accepted by the profession, and it has not been accepted by Blue Cross in that area.

This highlights the fact that planning is essential; that the community, including the physicians and everyone else, must recognize the need, and that the facility, whether it be free standing or hospital-based, must serve that demonstrated need.

There is a genuine risk of diminution in quality of surgical care if we should develop a series of surgical outpatient facilities in shopping centers all over the country without the careful planning and quality control employed in Phoenix. If there should be overemphasis on the profit factor it could jeopardize quality. This has clearly not been done in Phoenix where they are very jealous of their quality control. The principals in Phoenix are conspicuously opposed to the idea of an excess proliferation of poor quality facilities.

But the controversy between in-hospital facilities and outpatient facilities as independent, entrepreneurial enterprises on the one hand and hospital-based and hospital-regulated facilities on the other highlights the importance of the accreditation process. I believe that the profession and the accrediting agencies have a very difficult but essential job to do in addressing themselves to this controversy. Whether the facility be free standing or hospital based, the essential objective we are all interested in is lower cost for readily available, high quality surgical care.

DR. WILLIAM S. McCUNE (Washington, D. C.): I have been very interested in this report, because we feel that the development of units of this kind are an important step forward in overcoming the high cost of medical care, and in preventing the overutilization of hospital beds.

In George Washington University Hospital, a similar section has functioned for 4 or 5 years, in which several thousand operative procedures have been performed. It differs somewhat from the one that Dr. Davis described, in that we have three operating rooms which are entirely separate from the main operating suite, but are connected with it through the recovery room. A portion of the recovery room is reserved for use by what we call in-and-out, or ambulatory patients.

The unit is in charge of an anesthesiologist who is in complete control. We have two trained nurses, and usually two trained practical nurses on duty there.

Our system differs slightly, in that these patients never occupy a hospital bed of any kind, but they come into the hospital on the morning of the procedure. If they are operated upon under local anesthesia, there is no problem.

If they are to have a general anesthetic, they undergo chest x-ray, complete blood studies, and urinalysis in the hospital.

The patient brings a form filled out by his local physician which contains the history and data of his physical examination. After the operative procedure he remains in the recovery room, or that portion of it assigned to him, until his departure is approved by the anesthesiologist in charge.

This procedure has been very compatible with both the surgeons and the patients alike. We have performed many operative procedures there such as operations on the extremities, as Dr. Davis has pointed out, D&C's, cystoscopies, and VIP's (that is, voluntary interruption of pregnancy).

We have had only one death in this section, an unfortunate cardiac arrest in a patient undergoing a cystoscopic examination.

There are two possible disadvantages to this system. One is that the patient who comes into the hospital in the morning to have a general anesthetic may not realize the danger. He may have had some breakfast before his admission which could cause anesthesia difficulties, although, of course, this danger is supposedly well controlled.

Secondly, we have found, strangely enough, that surgeons who do not use the section very often consider it to be minor surgery. They do not request an assistant and sometimes they section more than they should; *they* may not need an assistant, but perhaps the patient does. However, there have been no ill effects from this, as far as I know.

We recommend this system highly. As far as cost is concerned—I do not have the exact figures, but I believe the cost of anesthesia and the operating room is slightly less than half the cost which would be incurred by the use of the main operating room suite.

DR. J. M. ZIMMERMAN (Baltimore): I have had the privilege of reviewing the manuscript and discussing it with Drs. Davis and Detmer. The system we have followed is similar to the one Dr. McCune has described. The community hospital has 300 beds—Church Home and Hospital, which is an urban general hospital. We have been treating about 40 to 50 patients a month using general anesthesia for several years. We have no hospital beds set aside for these patients. The patient simply goes to the recovery room at the completion of the procedure and is discharged from there.

We have been performing the same types of procedures that Dr. Davis described. With Maryland's liberalized abortion law, about one-third of our patients are admitted for therapeutic abortions. We perform only suction D&C's on an outpatient basis—no saline injections.

Our patients all have histories and physical examinations suitable for administration of general anesthesia prior to coming to the hospital. They arrive at the hospital about an hour prior to the procedure. They receive their premedication and undergo laboratory tests, x-rays and so forth.

We have had very few problems. One or two patients who had inadvertently eaten beforehand, were dismissed and brought back at another time. A few patients with prolonged recovery from anesthesia remained in the recovery room for protracted periods or were actually admitted to the hospital.

It is important to have very careful criteria for selection of patients and very careful plans for handling of the patient, including having a member of the family present for his return home, and so forth.

The acceptance, both by surgeons and by patients, and by third-party carrier, has been excellent and has led to inquiries from other hospitals. Our patient group which is an extremely conservative one, has accepted this approach extremely well.

Again I congratulate the authors for developing this approach to an important problem, and particularly in an era in which there is some risk to this type of innovation, with rising malpractice suits, and so forth.

I would like also to congratulate them for documenting some of the cost savings involved. I would inquire if they have any particular words for those of us in community hospitals as to what they feel are cardinal principles for developing this kind of program.

DR. JONATHAN E. RHOADS (Philadelphia): Dr. Davis was kind enough to give me a copy of the paper, and asked if I would comment on it. I think this subject has been extremely well covered.

It is an economic paper, and I have with me two reports from an economist which are not directly relevant, but I believe it is interesting to see what people with an entirely economic approach are thinking about medicine.

This comes from the organization of David L. Babson and Co., Inc., and it came to me as a trustee of a college which it serves. The point is made that American medicine is really not so bad as the press often suggests, and it points out not only that life expectancy is continually going up but particularly that in the 5 years between 1965 and 1970 there have been very substantial gains in the reduction of infant mortality.

We think of the new proposals that are before the congress for national health care as being inordinately expensive. The economists point out that actually what we have now is already very expensive, and the Nixon proposal increases the costs only 2 per cent, the AMA Medicare perhaps 5 per cent, and even the Kennedy-Griffiths bill only 10 per cent in total cost. These plans do however have the profound effect of shifting more costs from the private sector to government. This is particularly true of the Javits and Kennedy-Griffiths bills.

The point has been made that whenever an independent laboratory has opened in a doctors' building across the street from a hospital, the

hospital has had to raise its rates. A plausible explanation is that these laboratories do the convenient, easy things. They skim off the cream, and they leave the expensive, seldom-done tests to the hospital to do, and the hospital loses its money-making procedures and is stuck with the money-losing procedures, and therefore it has had to raise its rates.

One wonders whether the same phenomenon might become apparent with the development of ambulatory-surgical units. This would not happen at the Watts Hospital where the demand for services has kept the hospital completely full, and this additional facility has simply increased the services available to the community. However, the country over, hospital admissions are down, and there are a number of areas where hospitals are not full, and one has to distinguish I think between the cost savings computed as the average cost—per patient day and the actual savings which a community will gain when a hospital that is not full is emptied further.

If a hospital was emptied enough to close up a portion of it, we would get real savings, but if we just have a few extra empty beds, we have saved only on the cost of food, laundry, and medication for those patients, and the real costs, which are largely in personnel, often can not be trimmed back.

I do think this is an excellent study. There is no question but that the third party payors, who have often paid only for inpatient services, have caused a tremendous swing of the pendulum toward hospitalization, and that we are rightly seeing a move back in the other direction.

I think that it will be possible to use these centers and to save money as has been so very well demonstrated by Drs. Davis and Detmer, and we must do it.

On the issue of whether we should support the center for surgery for ambulatory patients as a free-standing unit or as one in a hospital such as the unit at Watts, there is really no doubt in my mind. The Surgicenter is not a free-standing unit. It can only exist if it is supported by the facilities of a hospital. The 'Surgicenter' in Phoenix I believe makes the point that they have arrangements for admission at a hospital of any patient who develops enough difficulty to require it.

If these difficulties should occur, I am convinced personally that these patients belong in hospitals where the patient has the backup of the hospital's total facilities immediately on the occasions that he needs it.

DR. J. ALEX HALLER (Baltimore): I would like to emphasize the particular applicability of this type of unit for the care of elective operative procedures in children. We have been using this type of facility over the last 6 years, and have found it not only acceptable to parents, but, as a matter of fact, there is great competition for using this particular facility for such procedures

as hernia repairs and circumcisions and other operative procedures which do require general anesthesia but do not require that the child stay in the hospital. The hospital still remains the most dangerous environment for the healthy person, and most of the elective procedures are performed in patients who are not going to be sicker after the operative procedures.

I would like to emphasize only one aspect of the report, and that is that we have not attempted to identify any inpatient area at all for these patients. As Dr. Zimmerman and Dr. McCune have indicated, we have used our recovery rooms for the care of the patients, and discharged them from the recovery rooms.

In this era, when there seems to be a tendency to try to continue building, to make facilities larger, requiring more people, and also more space, I believe it is time we looked very carefully at how efficiently we are using those facilities which we already have and attempt to use them in a better fashion.

I am aware of the fact that with computers we get better statistics and—presumably, at least—know more about what is going on around the hospital, but I would still submit that computers cannot replace the heart of a physician. It is important that we continue to have some rapport, not only with our patients but other physicians. The larger these facilities get, the more difficulty I have in communicating.

We have found we can do this in our standing facility and have the quality controls in our regular operating rooms and in our regular recovery rooms, and I believe that this type of innovative approach which Dr. Davis and Dr. Detmer have presented to us can be used widely, not only in university hospitals, but in our community hospitals as well.

DR. DON E. DETMER (Closing): Relative to the comments of Drs. Zimmerman, Haller and McCune, I think occasionally there are patients who have some delay in their recovery from anesthesia. To keep these people in recovery room areas that are tight for space can be a problem, and I think the use of essentially a redesign of existing hospital space at the Watts Hospital has

circumvented this. We have been able to move these people out of the recovery room, and yet keep them for what appears to be a safe recovery.

Dr. Zimmerman asked a question about requisites for an appropriate unit. (Slide) There are a few of these that we feel are of some importance. In terms of an appropriate selection of the patients, I think this will be very important and really for us has been no big problem. It will help to avoid legal difficulties if there is a good rapport between the patient and the physician and a full discussion of the matter.

The area of professional staff support is also important. Two thirds of our staff have used the unit, and to set up such a unit without the interest and support of the staff would lead to failure.

Third, you need to have capacity in your operating room and anesthesia staff that is not being used, and we have found that utilizing just the standard operating rooms and trying to schedule these cases as the first case or so in the morning has allowed us to more efficiently utilize all our existing facilities and staff.

The waiting list for hospital beds is an important facet that Dr. Rhoads referred to. Watts has a waiting list, and we have found that the hospital administration has been very cooperative, and I think a lot of it really stems from that facet.

Appropriate unit size is an important consideration. I do not think you should make a very large unit until you have studied the utilization or likely utilization of such a unit. You should have a unit which is well related to the patient population and the surgical demand.

Finally, the cooperation of the third parties—this problem generally is solved as the unit develops. We started out with the support and cooperation of Blue Cross and at 3 months we had seven carriers, and currently nineteen carriers, which essentially is the bulk of the carriers in our area.

Dr. Parker's *Presidential Address* referred to the need for appropriate change in medical care, and Dr. Davis and I would like to think that a hospital-based unit such as ours is a mechanism for delivering high quality surgical care more efficiently.